

Amendments to the Claims

1-24. (Canceled)

25. (New) A method of creating a program table to define a temporal arrangement of a plurality of contents, said method comprising the steps of:

utilizing a constraint condition solution means to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents; and

utilizing a score setting means to set priorities, when constraint falls into an excess state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted while preferentially employing said constraint condition higher in priority.

26. (New) A method of creating a program table to define a temporal arrangement of a plurality of contents, said method comprising the steps of:

utilizing a constraint condition solution means to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents; and

utilizing a score setting means to set scores, when constraint falls into a shortage state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted by making a comparison between a plurality of operation results of operations using a function in which said score is set as a parameter.

27. (New) A method of creating a program table to define a temporal arrangement of a plurality of contents, said method comprising the steps of:

utilizing a tree structuring means to express said program table by a tree structure having one or a plurality of hierarchies in which elements indicative of said contents constituting said program table are disposed in a lowest-rank layer and elements summarizing features of lower-rank elements are disposed in a rank higher with respect to the elements indicative of said contents; and

utilizing a constraint condition solution means to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents, so that said program table satisfies constraint conditions related to whole time width of said program table and time widths of said elements on a same hierarchy.

28. (New) The method according to claim 25, characterized in that a description of said constraint condition is made through the use of a constraint condition description function defined in advance.

29. (New) The method according to claim 25, characterized in that user's liking information indicative of a liking of a user who selects said contents is acquired as said constraint condition.

30. (New) The method according to claim 25, characterized in that said constraint condition is automatically acquired by automatically generating a user's liking information through learning of said user's liking.

31. (New) The method according to claim 25, characterized in that information indicative of a state related to playing of said contents is acquired as said constraint condition.

32. (New) The method according to claim 25, characterized in that said program table is created by making reference to content attribute information indicative of an attribute of each of the plurality of contents.

33. (New) The method according to claim 25, characterized in that a constraint logical programming technique is used as said constraint solution technique.
34. (New) The method according to claim 25, characterized in that an arrangement of said contents is optimized on the basis of one of a score set with respect to said contents, a correlation of attributes of said contents and a correlation of said contents or a combination thereof at the creation of said program table or after the creation thereof.
35. (New) The method according to claim 25, characterized in that said content to be disposed at a next position is determined on the basis of said content disposed at a previous position with respect to a time axis.
36. (New) The method according to claim 25, characterized in that said content to be disposed at a previous position is determined on the basis of said content disposed at a next position with respect to a time axis.
37. (New) The method according to claim 25, characterized in that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis.
38. (New) The method according to claim 25, characterized in that an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum as a whole.
39. (New) The method according to claim 26, characterized in that a description of said constraint condition is made through the use of a constraint condition description function defined in advance.

40. (New) The method according to claim 26, characterized in that user's liking information indicative of a liking of a user who selects said contents is acquired as said constraint condition.

41. (New) The method according to claim 26, characterized in that said constraint condition is automatically acquired by automatically generating a user's liking information through learning of said user's liking.

42. (New) The method according to claim 26, characterized in that information indicative of a state related to playing of said contents is acquired as said constraint condition.

43. (New) The method according to claim 26, characterized in that said program table is created by making reference to content attribute information indicative of an attribute of each of the plurality of contents.

44. (New) The method according to claim 26, characterized in that a constraint logical programming technique is used as said constraint solution technique.

45. (New) The method according to claim 26, characterized in that an arrangement of said contents is optimized on the basis of one of a score set with respect to said contents, a correlation of attributes of said contents and a correlation of said contents or a combination thereof at the creation of said program table or after the creation thereof.

46. (New) The method according to claim 26, characterized in that said content to be disposed at a next position is determined on the basis of said content disposed at a previous position with respect to a time axis.

47. (New) The method according to claim 26, characterized in that said content to be disposed at a previous position is determined on the basis of said content disposed at a next position with respect to a time axis.

48. (New) The method according to claim 26, characterized in that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis.

49. (New) The method according to claim 26, characterized in that an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum as a whole.

50. (New) The method according to claim 27, characterized in that a description of said constraint condition is made through the use of a constraint condition description function defined in advance.

51. (New) The method according to claim 27, characterized in that user's liking information indicative of a liking of a user who selects said contents is acquired as said constraint condition.

52. (New) The method according to claim 27, characterized in that said constraint condition is automatically acquired by automatically generating a user's liking information through learning of said user's liking.

53. (New) The method according to claim 27, characterized in that information indicative of a state related to playing of said contents is acquired as said constraint condition.

54. (New) The method according to claim 27, characterized in that said program table is created by making reference to content attribute information indicative of an attribute of each of the plurality of contents.

55. (New) The method according to claim 27, characterized in that a constraint logical programming technique is used as said constraint solution technique.

56. (New) The method according to claim 27, characterized in that said elements associated with each other in higher-rank and lower-rank layers have attribute information or time width information consistent with each other.

57. (New) The method according to claim 56, characterized in that a portion of said program table is rearranged on the basis of said tree structure while said elements associated with each other in higher-rank and lower-rank layers keep attribute information or time width information consistent with each other.

58. (New) The method according to claim 57, characterized in that the rearrangement of the portion of said program table is made by employing one of a method of deriving a new solution through the use of a previous solution or a method of deriving a new solution through the use of a history related to a previous solution derivation, or by employing a combination of these methods.

59. (New) The method according to claim 27, characterized in that an arrangement of said contents is optimized on the basis of one of a score set with respect to said contents, a correlation of attributes of said contents and a correlation of said contents or a combination thereof at the creation of said program table or after the creation thereof.

60. (New) The method according to claim 27, characterized in that said content to be disposed at a next position is determined on the basis of said content disposed at a previous position with respect to a time axis.

61. (New) The method according to claim 27, characterized in that said content to be disposed at a previous position is determined on the basis of said content disposed at a next position with respect to a time axis.

62. (New) The method according to claim 27, characterized in that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis.

63. (New) The method according to claim 27, characterized in that an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum as a whole.

64. (New) A program table creation device for creating a program table defining a temporal arrangement of a plurality of contents, the device comprising;

a creating unit that creates said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents; and

a setting unit that sets priorities, when constraint falls into an excess state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted while preferentially employing said constraint condition higher in priority.

65. (New) A program table creation device for creating a program table defining a temporal arrangement of a plurality of contents, the device comprising;

a creating unit that creates said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents; and

a setting unit that sets scores, when constraint falls into a shortage state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is

conducted by making a comparison between a plurality of operation results of operations using a function in which said score is set as a parameter.

66. (New) A program table creation device for creating a program table defining a temporal arrangement of a plurality of contents, the device comprising;

an expressing setting unit that expresses said program table by a tree structure having one or a plurality of hierarchies in which elements indicative of said contents constituting said program table are disposed in a lowest-rank layer and elements summarizing features of lower-rank elements are disposed in a rank higher with respect to the elements indicative of said contents; and

a creating unit that creates said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents, so that said program table satisfies constraint conditions related to whole time width of said program table and time widths of said elements on a same hierarchy.

67. (New) The program table creation device according to claim 64, characterized in that said program table creation device is mounted in a vehicle and made to create said program table of programs to be watched and heard in the interior of said vehicle.

68. (New) The program table creation device according to claim 64, characterized in that a constraint logical programming technique is used as said constraint solution technique.

69. (New) The program table creation device according to claim 65, characterized in that said program table creation device is mounted in a vehicle and made to create said program table of programs to be watched and heard in the interior of said vehicle.

70. (New) The program table creation device according to claim 65, characterized in that a constraint logical programming technique is used as said constraint solution technique.

71. (New) The program table creation device according to claim 66, characterized in that said program table creation device is mounted in a vehicle and made to create said program table of programs to be watched and heard in the interior of said vehicle.

72. (New) The program table creation device according to claim 66, characterized in that a constraint logical programming technique is used as said constraint solution technique.

73. (New) A program table creation system for creating a program table defining a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in a predetermined network, so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents, and so arranged as to set priorities, when constraint falls into an excess state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted while preferentially employing said constraint condition higher in priority; and

a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server.

74. (New) A program table creation system for creating a program table defining a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in a predetermined network, so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents, and so arranged as to set scores, when constraint falls into a shortage state in constraint solution processing at the creation of said program table, with respect to said contents and/or said

constraint condition so that said constraint solution processing is conducted by making a comparison between a plurality of operation results of operations using a function in which said score is set as a parameter; and a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server.

75. (New) A program table creation system for creating a program table defining a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in a predetermined network, so arranged as to express said program table by a tree structure having one or a plurality of hierarchies in which elements indicative of said contents constituting said program table are disposed in a lowest-rank layer and elements summarizing features of lower-rank elements are disposed in a rank higher with respect to the elements indicative of said contents, and so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents, so that said program table satisfies constraint conditions related to whole time width of said program table and time widths of said elements on a same hierarchy; and

a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server.

76. (New) The program table creation system according to claim 73, characterized in that said communication unit is mounted in a vehicle and said program table creation server creates said program table of programs to be watched and heard in the interior of said vehicle.

77. (New) The program table creation system according to claim 73, characterized in that a constraint logical programming technique is used as said constraint solution technique.

78. (New) The program table creation system according to claim 74, characterized in that said communication unit is mounted in a vehicle and said program table creation server creates said program table of programs to be watched and heard in the interior of said vehicle.

79. (New) The program table creation system according to claim 74, characterized in that a constraint logical programming technique is used as said constraint solution technique.

80. (New) The program table creation system according to claim 75, characterized in that said communication unit is mounted in a vehicle and said program table creation server creates said program table of programs to be watched and heard in the interior of said vehicle.

81. (New) The program table creation system according to claim 75, characterized in that a constraint logical programming technique is used as said constraint solution technique.